ETHNOGRAPHIC STUDIES IN MELANESIA.[1]

THE two volumes of "The History of Melanesian Society," by Dr. Rivers, represent two methods of the study of mankind, the ethnographical and the ethnological. The first volume is devoted to an ethnographical study of a considerable portion of southern and central Melanesia and of various Polynesian islands; the account of Tikopia is of especial interest, as, although situated in Melanesia, it is inhabited by Polynesians, who have scarcely been affected by external influences. Most of the data were collected under the auspices of the Percy Sladen Trust. In the second volume the author breaks new ground in ethnology, as he synthesises and gives explanations of an even wider array of facts than those accumulated in the first volume.

Those who are acquainted with the previous writings of Dr. Rivers are well aware that, whether recording new facts or correcting and expanding information acquired by others, he has always paid great attention to method; indeed, he has perhaps done more than anyone else in this country to establish ethnology on scientific methods. It is interesting to note that until he began writing the theoretical discussion in the second volume, he was a firm adherent of the current English school, being almost exclusively interested in the evolution of belief, custom, and institution, and paying little attention to the complexity of the several cultures. He came to see, however, that Melanesian culture was more complex than had at first appeared, and that it was necessary to dissect out, so to speak, the associated elements in each of the component cultures.

Graebner was the first to study this problem systematically, but he approached it from the point of view of the museum curator without experience as a field ethnologist. Dr. Rivers states that the chief aim of his book "has been to show how social institutions and customs have arisen as the result of the interaction between peoples, the resulting compound resembling that produced by a chemical mixture in that it requires a process of analysis to discover its composition. To Graebner, on the other hand, the process of blending of cultures resembles rather a physical mixture in which the component elements exist side by side readily distinguishable from one another. . . . . He assumes that social institutions and religious practices can be carried about the world and transplanted into new homes as easily, and with as little modification, as weapons and implements. . . . Such an assumption is impossible to anyone who appreciates the far more vital and essential character of the less material elements of culture" (ii., p. 585).

By means of the genealogical method Dr. Rivers has discovered several remarkable forms of marriage in Melanesia, or has deduced forms which have existed previously. For example, cross-cousin marriage (*i.e.*, between the children of a brother and those of his sister) occurs in widely separated parts of Melanesia, and wherever found is accompanied by features of the systems of relationship which are clearly the direct result of this form of marriage; these features are found in places where cross-cousin marriage does not now take place, but they must certainly be survivals of it. The same applies to marriage with the wife of the mother's brother. The extraordinary system of the island of Pentecost owes its special features to two anomalous forms of marriage which either still exist or have been practised on the island, viz., marriage with the wife of a mother's brother, and with the granddaughter of the brother. For the latter, there

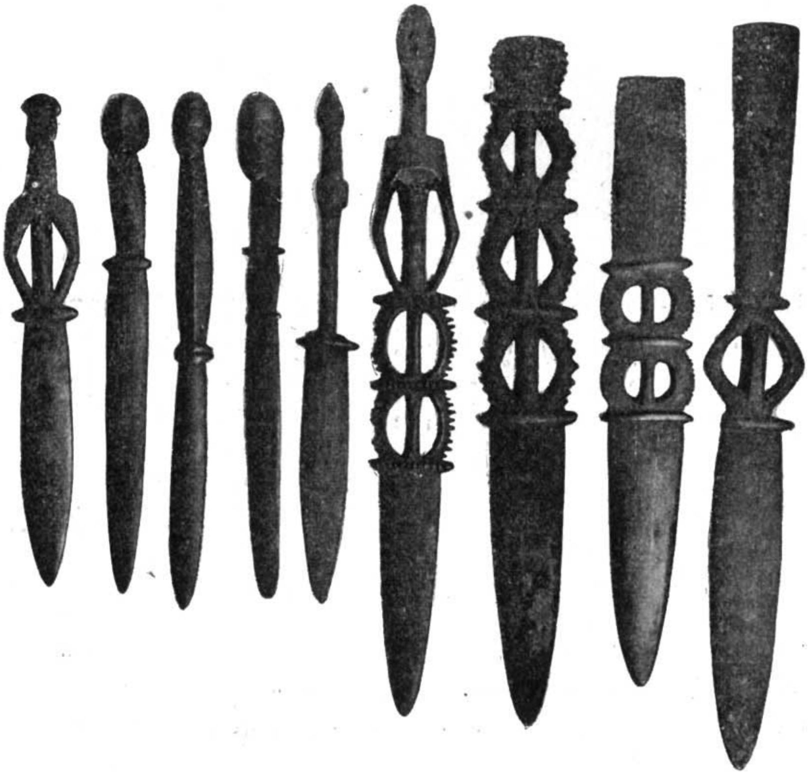

FIG. 1.—Pudding-knives from Ureparapara, Banks Islands. From "The History of Melanesian Society."

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[1] "Percy Sladen Trust Expedition to Melanesia. The History of Melanesian Society." By W. H. R. Rivers. Vol. i., pp. xii+400; Vol. ii., pp. 610. (Cambridge: At the University Press, 1914.) Price 36*s*. net two volumes.

is a clear tradition of its occurrence in the past, and it is said still to be practised. This form of marriage also takes place among the Dieri of Australia, who recognise that relatives belonging to generations twice removed from one another are naturally husband and wife (ii., p. 47). Dr. Rivers will be interested to learn that Sarat Chandra Roy, in his forthcoming book on the Oraons of Chota Nagpur, will produce evidence to show that there are "reasons for inferring the former existence amongst the Oraons (before clan exogamy was instituted) of a system of marriage or union between persons related to each other as grandparent (or grand-uncle or grand-aunt) and grandchild (or grand-nephew or grand-niece)." These archaic social institutions may be preserved in nomenclature like flies in amber. Dr. Rivers argues that the anomalous forms of marriage imply a dual organisation with matrilineal descent, and he is driven to assume a state of society in which the elders had acquired so predominant a position that they were able to monopolise all the young women. He also points out that, according to this view, cross-cousin marriage arose as a modification of the marriage with the wife of the mother's brother.

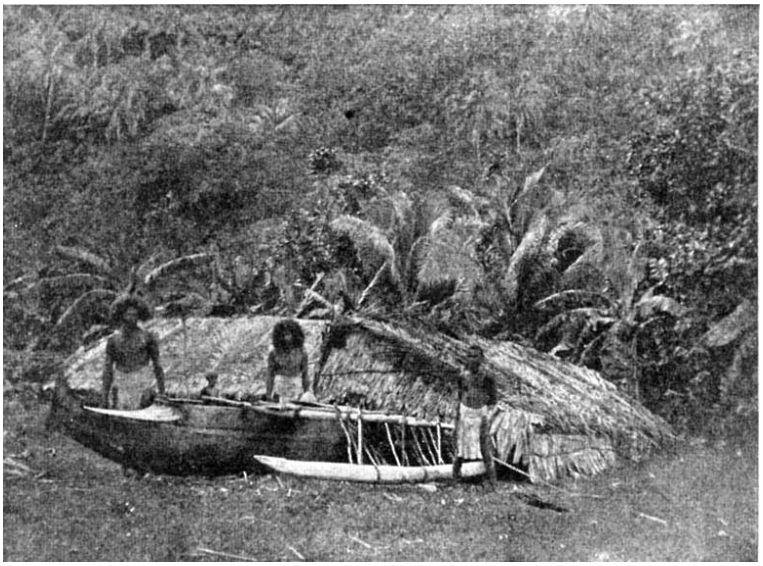

Fig. 2.—Canoe and canoe-shed, Tikopia. From "The History of Melanesian Society."

Dr. Rivers has made a special study of the secret societies of Melanesia, and he works out an elaborate argument to show that the secret ceremonial is derived from rites brought by an immigrant people, relatively few in number, who were solely of the male sex, or accompanied by very few women of their own race. By considering the distribution and the customs and objects associated with betel-chewing and kava-drinking, he shows that these comestibles mark two main migrations into Melanesia, which previously was inhabited by a people with a dual organisation. Various methods of the disposal of the dead indicate racial complexity, and a study of each mode combined with associated data leads to a finer analysis. His conclusions may be summarised as follows:—

The introduction of betel-chewing was relatively late and restricted and may have taken place from Indonesia after the invasion of the Hindus. With it were associated marriage with the wife of the father's brother, the special sanctity of the skull, and the plank-built canoe.

The effect of the kava-using peoples was more extensive in time and space; they had neither clan organisation nor exogamy, some preserved the body, and respect was paid to the head or skull. Contact with the earlier populations resulted in wife purchase and the development of secret societies. They introduced the cult of the dead and the institutions of taboo, totemism, and chieftainship, an outrigger canoe, money, the slit drum or gong, the conch trumpet, megalithic monuments, and the fowl, pig, and dog. There may have been two immigrations of peoples who made monuments of stone. (1) Those who erected the more dolmen-like structures, probably had aquatic totems, and interred their dead in the extended position; (2) and later, those whose stone structures tended to take the form of pyramids, who had bird totems, practised a cult of the sun, and cremated their dead.

These immigrants found a people divided into two exogamous groups, with matrilineal descent, and three special forms of marriage (with daughter's daughter, wife of mother's brother, and wife of father's father), they had rectilinear decorative designs, and employed the bullroarer. The dual organisation seems to have been formed by fusion rather than by fission, judging from the frequent survival of hostility between the two moieties, their mythology, character, and possibly even slight traces of differences in physique. Whatever the previous social condition of each moiety, a fusion of two races under certain conditions might produce matrilineal descent. The dual organisation would thus imply a dual origin, of which the immigrant people spoke an Austronesian language (as did the kava and betel peoples), interred their dead in a sitting position, feared the dead, believed in spirits, practised circumcision, introduced the bow and arrow, and an outrigger canoe. The Baining of New Britain may represent, though, of course, in a modified form, the aboriginal elements of the dual people; they are devoid of any fear of the dead, and their small stature suggests that the pre-dual people may have been pygmies.

Dr. Rivers has produced a work which will have far-reaching results, it being not merely a storehouse of facts, but a demonstration of method, and conclusions are arrived at which will be sure to provoke discussion. Whatever may be the final results of such discussions, this book will probably take rank as a landmark in the study of ethnology. A. C. HADDON.

TYPHUS FEVER.

TYPHUS fever, which has just appeared in some of the prisoners' camps in Germany and is rife in Serbia, has been one of the great epidemic diseases of the world. Hirsch remarked:—"The history of typhus is written in those dark pages of the world's story which tell of the grievous visitations of mankind by war, famine, and misery of every kind."

The name is of no great antiquity, for it was applied to a malady or group of maladies first by Sauvages in 1759. Until then, from the time of Hippocrates downwards, it had been employed to designate a confused state of intellect, with a tendency to stupor. It was, in fact, not until 1850 that typhus fever was finally differentiated from typhoid or enteric fever by the researches of Jenner. One of the older synonyms for the disease was *jail fever*, and in the sixteenth century, at the first three of the famous "Black Assizes," judges, sheriffs, and jurymen were stricken with it as the result of infection from prisoners brought for trial. Another name formerly given to it is *Morbus castrensis* or "military fever," on account of the ravages occasioned by it among soldiers and camp followers from the time of the Thirty Years' War and the English Civil War down to the siege of Sebastopol. Owing to the character of the eruption, typhus fever has sometimes been termed "spotted fever" (to be distinguished from cerebro-spinal fever, also known as spotted fever), and the German name is *flecktyphus*, also *typhus exanthematicus*, to distinguish it from *typhus abdominalis*, typhoid or enteric fever. The French name is similarly *typhus exanthématique*. Brill's disease, met with in New York, and Tabadillo of Mexico, seem to be manifestations of it. Few countries have suffered more than Ireland, and the disease has lingered in the outer Hebrides, but of late years has been practically unknown in England, and is seen but rarely in Scotland.

The invasion of typhus is, in the majority of cases, like pneumonia, sudden and severe after an incubation period of about twelve days. On the fourth or fifth day the eruption appears, first measly in character, but appearing on the wrists, trunk, and thighs, and afterwards becoming hæmorrhagic. The patient then suffers from severe fever with its usual concomitants, passing into extreme prostration. The nervous system suffers severely, and there is great muscular restlessness and tremor, excitement and delirium. In favourable cases the attack ends comparatively suddenly about the fourteenth day.

There are, of course, considerable variations in the course of the disease in individual cases; it is always to be regarded as a serious affection, and the average death-rate for all ages under favourable conditions is 15–19 per cent.; no age is exempt. An attack of typhus affords marked protection, and second attacks are as rare as those of small-pox. No special treatment for it has yet been discovered.

The ætiology of the disease is still uncertain: no specific micro-organism has been discovered, but it is probably protozoan in nature.

Typhus is markedly infectious, and the infectivity is greater the larger the number of cases which are aggregated together. The mode of spread for a long time was uncertain, and until recently it was regarded as being conveyed by the emanations from the patient. A few years ago, in the epidemic which occurred in Aberdeen, Prof. Matthew Hay made the pregnant suggestion, on epidemiological grounds, that the disease might be conveyed by fleas. Further investigations have conclusively proved that it is conveyed by the body-louse, possibly by the head-louse also. This important fact explains how it is that typhus is so prone to appear in times of stress, war, and famine—when misery prevails and personal cleanliness is difficult or impossible to maintain.

Prevention of the spread of the disease largely resolves itself, therefore, into extermination of lice, and much attention is now being directed to the means which may attain this end. R. T. H.

AN ADVISORY COUNCIL ON INDUSTRIAL RESEARCH.

THE proposed formation of an Advisory Council concerned with industrial and scientific research was announced by Mr. J. A. Pease, President of the Board of Education, to the deputation of which we gave an account last week. The scheme was described by Mr. Pease in Committee of the House of Commons on May 13 in connection with the Education Estimates; and the debate which followed upon it was one of the most important from a scientific point of view that has been heard in the House for a long time.

The general question of the relation of science to the State, and the particular work which a suitably constituted Advisory Council could undertake, are dealt with elsewhere in this issue of NATURE by Sir William Ramsay. We need scarcely remind our readers that the need for increased provision for research in pure and applied science has been urged in these columns for many years by leaders in the scientific world concerned not only with the advancement of natural knowledge, but also with the promotion of national prosperity. For the past ten years the British Science Guild has been continuously endeavouring, with little encouragement, to secure public and official recognition of scientific research and organisation as essential factors of industrial progress. It has shown over and over again that whereas in Germany the State fosters all work and institutions engaged in scientific work and advanced technology, and in the United States